

Figure 1

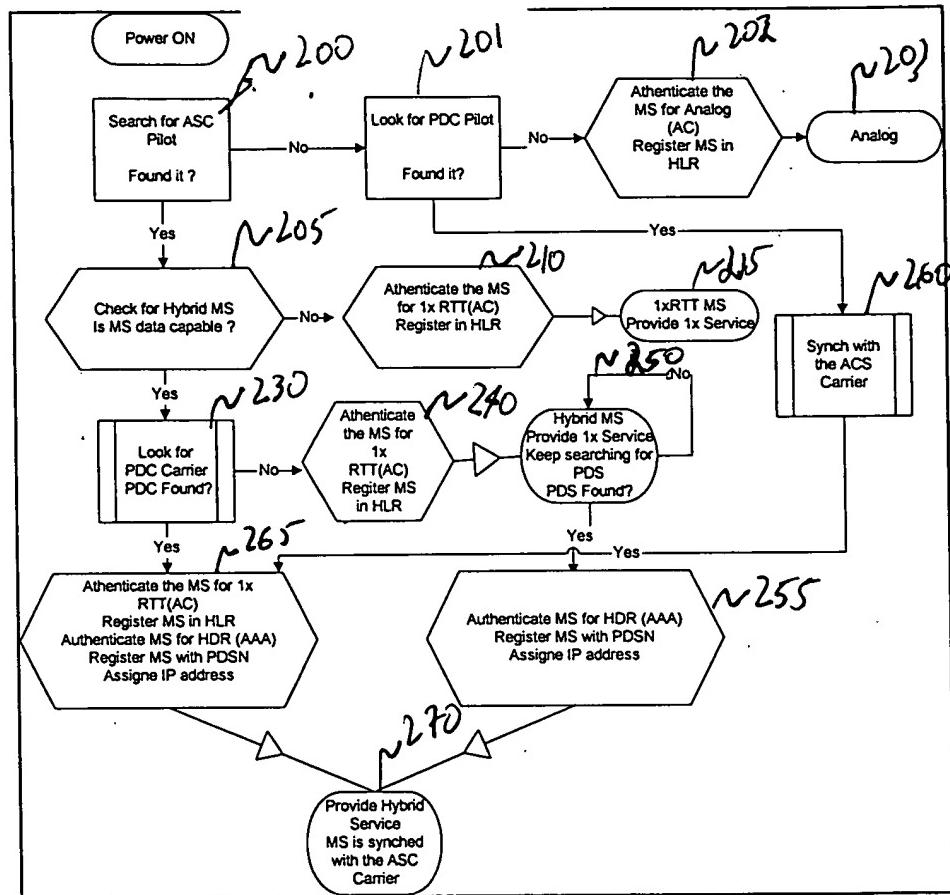


Figure 2

3.6

INCOMING DATA CALL IN IDLE STATEMS is on ASCMS has IP addressPDCN notifies BSC of call ~ 200 BSC notifies MSC of call via A-interface ~ 205 MSC checks COS ~ 210 If automatic switch over is ON ~ 215 If High data rate is ONSynch with PDCSwitch MS to PDCConnect MS to PDCN → Call is ON , Call CompleteMS disconnect data callSynch back with ASCElse ~ 220 Use the low rate data of 1xRTTMS can use simultaneous data and voiceElse ~ 225 Send an SMS with incoming data call (Y/N)If MS accepts callSend SMS message, Would you like to use high or low dataIf high data rate is selected ~ 230 Synch with PDCSwitch MS to PDCConnect MS to PDCN → Call is ONMS disconnect data callSynch with ASCElse ~ 235 Use the low rate data of 1xRTTMS can use simultaneous data and voiceElseData call is not accepted ~ 240

Figure 3

3.7 OUTGOING DATA CALL IN IDLE STATE

MS is on ASC

MS has IP address

MS initiates a data call

If automatic switch over is ON

~ 250

If is High data rate is ON

~ 255

Synch with PDC

Switch MS to PDC

Connect MS to PDCN → Call is ON

MS disconnect data call

Synch back with ASC

Else ~ 260

Use the low rate data of 1xRTT

Else ~ 270 MS can use simultaneous data and voice

Send SMS message, Would you like to use high or low data

If high data rate is selected ~ 275

Synch with PDC

Switch MS to PDC

Connect MS to PDCN → Call is ON

MS disconnect data call

Synch with ASC

Else ~ 280

Use the low rate data of 1xRTT

MS can use simultaneous data and voice

Figure 1

3.8 INCOMING DATA CALL WHILE ON VOICE

MS is on ASC

MS has IP address

PDCN notifies BSC of call

~ 300

BSC notifies MSC of call via A-interface

MSC checks COS

If automatic switch over is ON ~ 310

Check Fundamental Data rate feature

If is High data rate is ON ~ 315

Place caller on hold in the MSC

Inform voice call of situation (RCAN)

Call is still active in the BSC and MSC (Billing is ON)

Synch with PDC

Switch MS to PDC

Connect MS to PDCN → Call is ON

MS has control to switch back to voice call

MS disconnect data call

Synch with ASC

Bring back voice call

Else ~ 320

Use the low rate data of 1xRTT

MS can use simultaneous data and voice

Else ~ 325

Send an SMS with incoming data call (Y/N)

If MS accepts call

Send SMS message, Would you like to use high or low data

If high data rate is selected

Place caller on hold in the MSC

Inform voice call of situation (RCAN)

Call is still active in the BSC

and MSC-Billing On

Synch with PDC

Switch MS to PDC

Connect MS to PDCN → Call is ON

MS has control to switch back to voice

call

MS disconnect data call

Synch with ASC

Bring back voice call

Else ~ 335

Use the low rate data of 1xRTT

MS can use simultaneous data and voice

Else

Data call is not accepted ~ 370

Figure 5

3.9 OUTGOING DATA CALL WHILE ON VOICE

MS is on ASC

MS has IP address

MS initiates a data call

If automatic switch over is ON

Check Fundamental Data rate feature ~ 355

If is High data rate is ON

Place caller on hold in the MSC

Inform voice call of situation (RCAN)

Call is still active in the BSC and MSC (Billing is ON)

Synch with PDC

Switch MS to PDC

Connect MS to PDCN → Call is ON

MS disconnect data call

Synch back with ASC

Bring back voice call

Else ~ 360

Use the low rate data of 1xRTT

MS can use simultaneous data and voice

Else ~ 365

Send SMS message, Would you like to use high or low data

If high data rate is selected

Place caller on hold in the MSC

Inform voice call of situation (RCAN)

Call is still active in the BSC and MSC-Billing On

Synch with PDC

Switch MS to PDC

Connect MS to PDCN → Call is ON

MS disconnect data call

~ 370 Synch with ASC

Bring back voice call

Else

Use the low rate data of 1xRTT

MS can use simultaneous data and voice

Figure 6

3.12

Figure 7
INCOMING VOICE CALL WHILE ON DATA (HYBRID)

MS is on the PDC carrier
MSC get a voice call
Check COS for Voice Automatic Switch over
If feature is on block
 Block the call ~ 380
 Give RCAN
Else
 If feature is ON ~ 390
 Check Supplemental Data rate feature ~ 400
 If the High data rate is ON
 Cannot accept the call
 Caller is informed with RCAN
 Else ~ 410
 Synch with ASC
 Continue the data call on lower data
 Accept the voice call
 Treat call as 1XRTT
 Else ~ 420
 Send SMS to user, voice call is coming, accept call ?
 If caller accepts call
 Send SMS to user , "High data rate is no longer available"
 Synch with ASC
 Continue the data call on lower data
 Accept the voice call
 Treat call as 1XRTT
 Else
 Call is rejected ~ 430
 Caller is informed with RCAN

Figure 8

OUTGOING VOICE CALL WHILE ON DATA (HYBRID)

MS is on the PDC carrier
MS initiates a voice call
Send SMS to user " Are you sure, you will loose your high data rate ?"
If the user accepts ~ 445
 Synch with ASC ~ 445
 Continue the data call on lower data
 Make the voice call
 Treat call as 1XRTT call
Else
 Call is not placed ~ 450

3.1

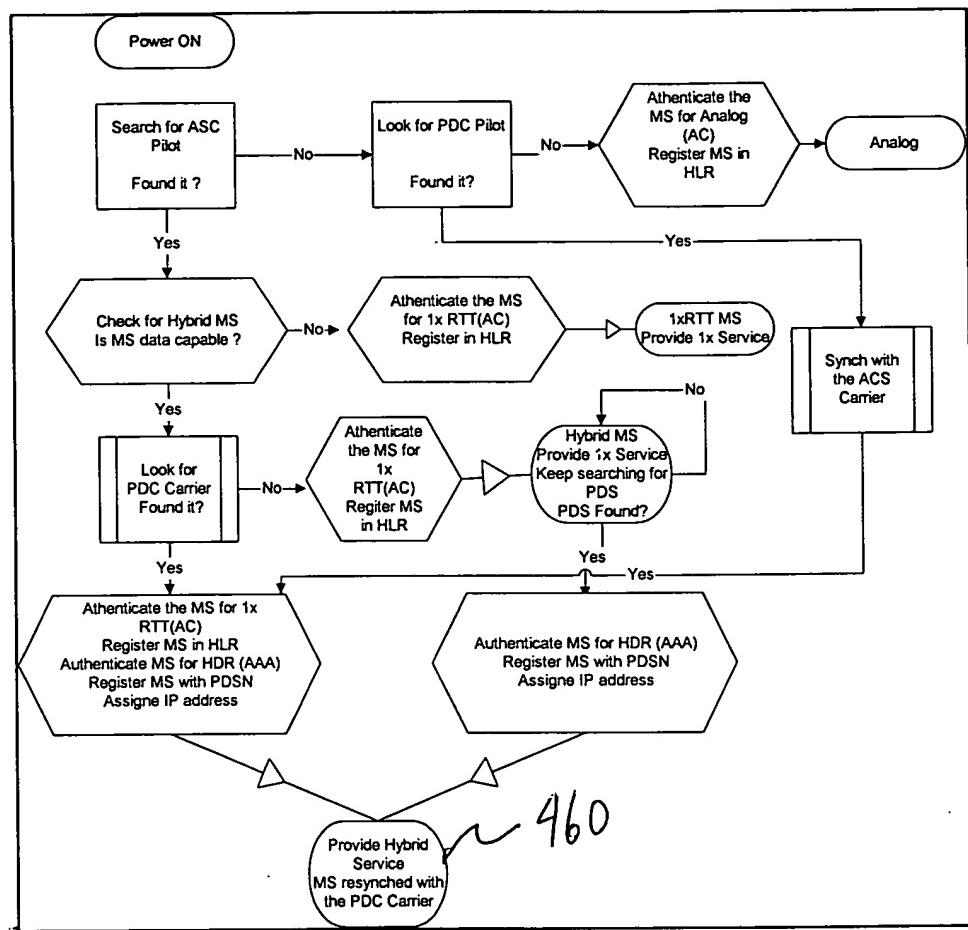
POWER ON

Figure 9

3.4

INCOMING VOICE CALL IN THE IDLE STATEMS is on PDCMSC gets the call~470MSC checks the COS for Automatic switch for voice callIf feature is ONMSC instructs the MS to search for the ASCMS finds the ASC and informs the MSCMS switches to ASCMSC sends that call to the MS → call is ONCall is complete (Release)~480 MSC instructs the MS to synch back with the PDCMS is synched with PDCElseMSC sends an SMS to the user telling him about the callIf MS accepts the callMSC instructs the MS to search for the ASCMS finds the ASC and informs the MSCMS switches to ASCMSC sends that call to the MS → call is ONCall is complete (Release)~490 MSC instructs the MS to synch back with the PDCMS is synched with PDCElseCall is rejected

Figure 10

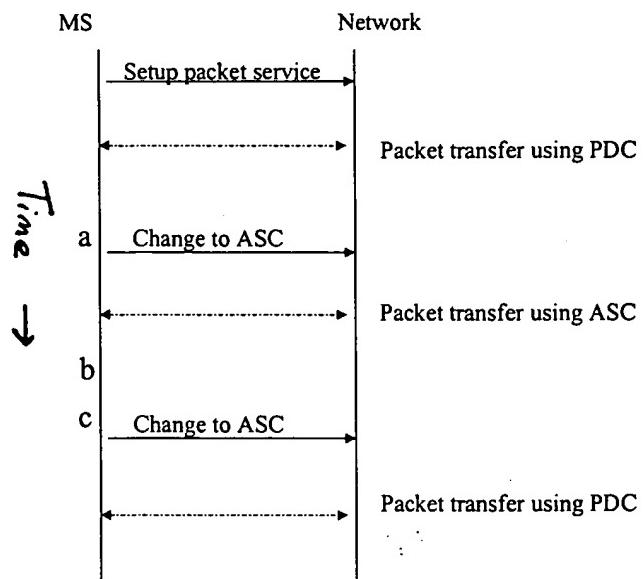


Figure 11

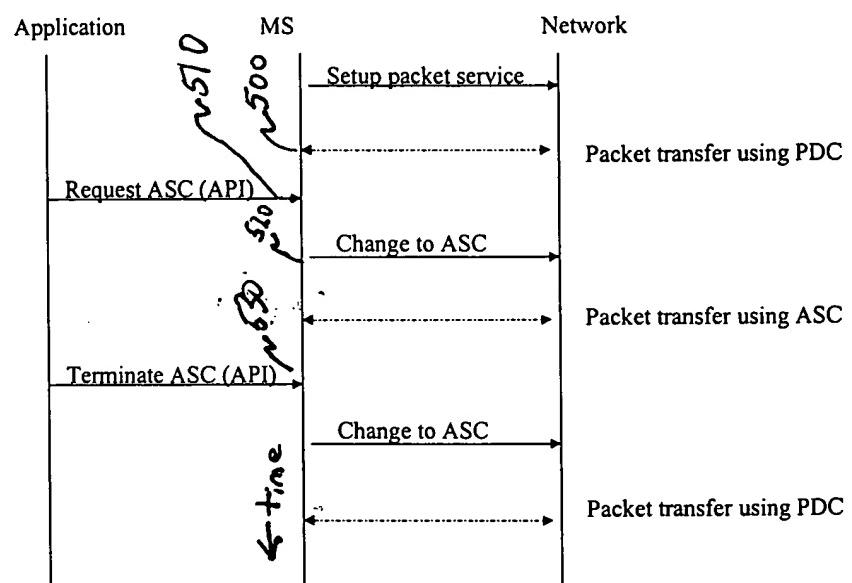


Figure 12